

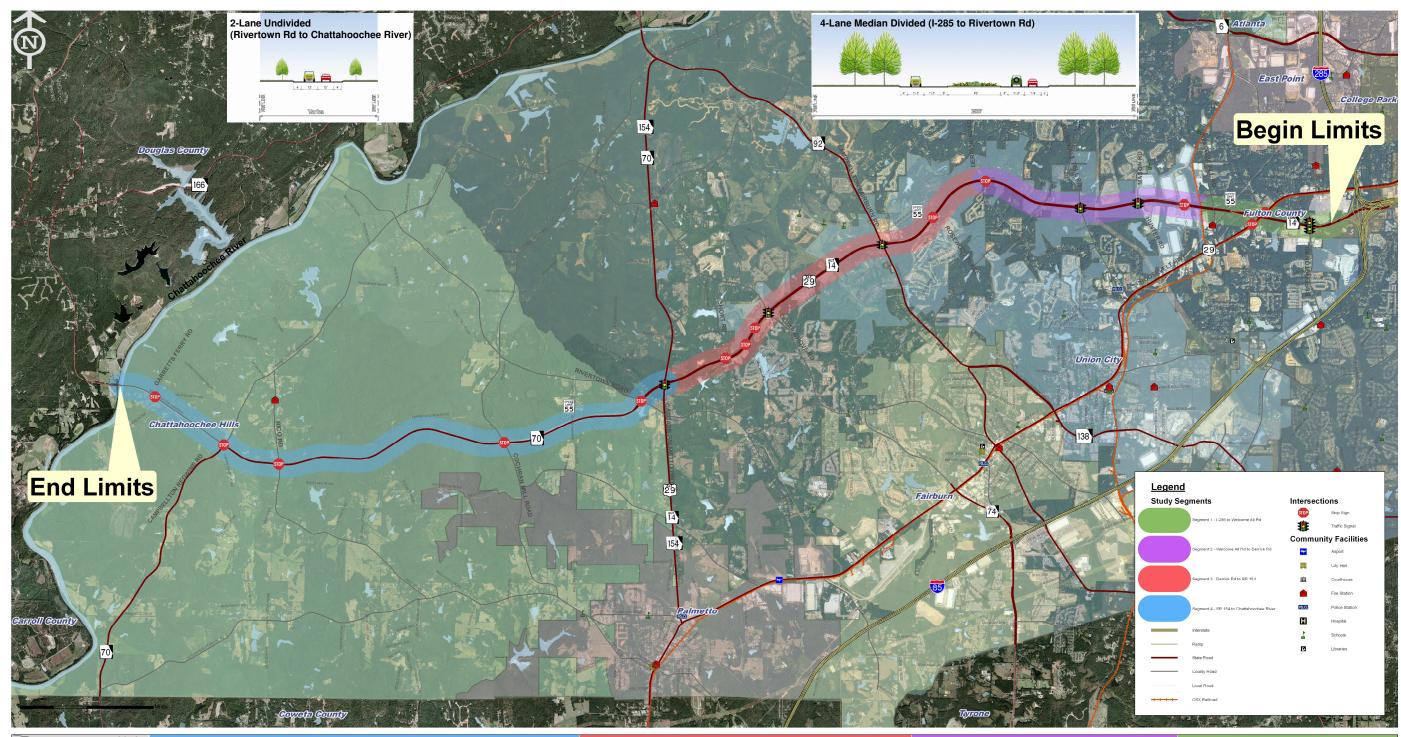


South Fulton Parkway Access Management Study



HNTB

Public Open House



Characteristics	Segment 4	Segment 3	Segment 2	Segment 1
Length	9 miles	6 miles	3 miles	2 miles
Typical Section	2-Lane Undivided Arterial	4-Lane Median Divided Arterial	4-Lane Median Divided Arterial	4-Lane Median Divided Freeway
Average Intersection Spacing	8,781 feet / 1.7 miles	4,433 feet / 0.8 mile	5,436 feet / 1.0 mile	4,994 feet / 0.9 mile
Ratio of Crash Rate to Statewide Average Crash Rate	0.39	0.18	0.27	0.21

- What is the Purpose and Need for this Study?
  - Desire to protect the infrastructure investment of the Parkway and provide opportunities for economic development. This will be accomplished by developing an Access Management Plan – a means to proactively managed and balance the interaction of transportation and land use along the Parkway.
  - This Study will also feed into regional and statewide efforts focused on Access Management.



Georgia Department of Transportation

## **Access Management is:**

The systematic control of the location, spacing, design and operation of driveways, median openings, interchanges and street connections to a roadway. The purpose of access management is to provide access to land development, while preserving the flow of traffic on the adjacent roadway system in terms of safety, capacity and speed.

# **Benefits of Access Management:**

- Improve Roadway Safety
- Preserve Roadway Capacity
- Support Land Development
- Prolong Roadway Life
- Maintain Roadway Travel Speed
- Reduce Travel Delay
- Reduce Fuel Consumption



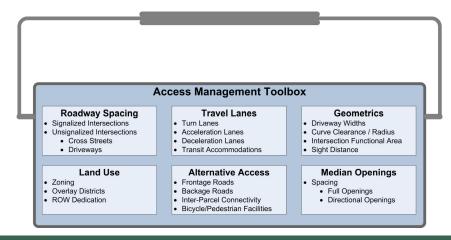
# **Types of Access Management**

- Medians Allow for separation of traffic and provides shelter for vehicles making left turns from or to a street.
- Auxiliary Lanes Left-turn and right-turn deceleration lanes separates turning vehicles from the through traffic stream. Acceleration lanes minimize speed differentials between through vehicles and entering vehicles.
- Roadway Location and Design Affects the ability of a driver to safely and easily enter and exit a facility. Reasonable spacing between roadways is important to the safety and capacity of the Parkway.
- Corner Clearance The distance from an intersection to the nearest access connection. Preserves traffic operations at intersections.
- Frontage / Backage Roads Provide local access from a secondary road and eliminates the conflicts between high-speed traffic and traffic entering and exiting to the highway.

## **Principles of Access Management:**

- 1. Provide a specialized roadway system by designing and managing roads according to their primary function.
- 2. Limit direct access to major roadways which serve higher volumes of through traffic and need more access control.
- 3. Promote intersection hierarchy by providing appropriate transition from one classification of roadway to another.
- 4. Locate signals to favor through movements by using long, uniform spacing of intersections and signals and ensuring the ability to coordinate signal timing.
- Preserve the functional area of intersections and interchanges by acknowledging how
  drivers need to respond with deceleration, maneuvering into another lane, stopping and
  turning. Access connections too close to intersections cause serious traffic conflicts and
  impair functionality.
- 6. Limit the number of conflict points between vehicles; vehicle and pedestrians; vehicles and bicyclists to reduce mistakes and collisions.
- 7. Separate conflict areas gives drivers time to address one potential set of conflicts before facing another.
- 8. Remove turning vehicles from through-traffic lanes through the addition of turning lanes.
- 9. Use non-traversable medians to manage left-turn movements which promotes safety and minimizes left turns.
- 10. Provide a supporting street and circulation system to appropriately accommodate development.

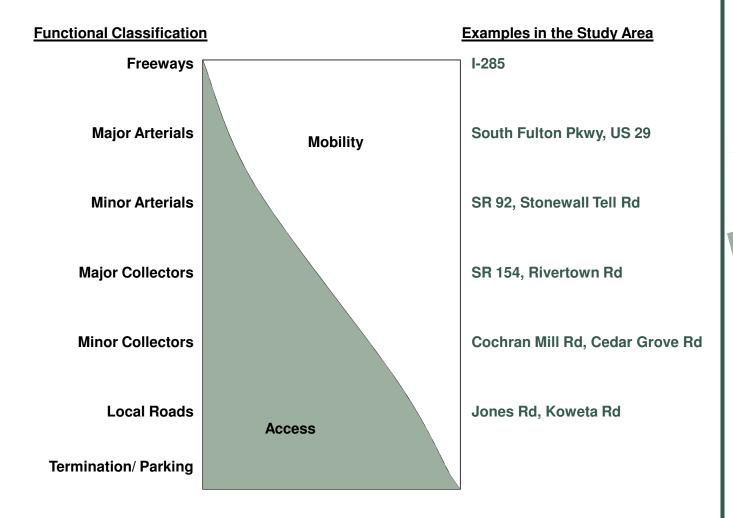
Source: Transportation Research Board Access Management Manual





# **Balancing Access & Mobility**

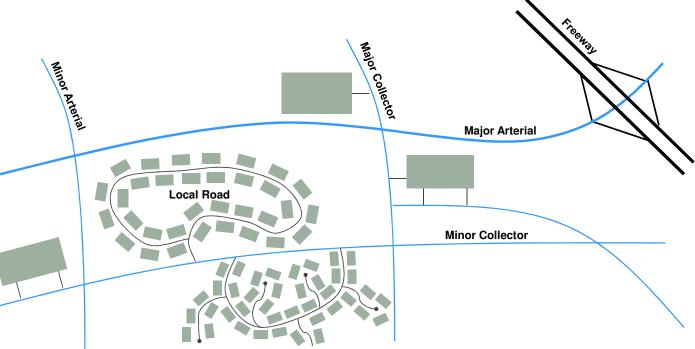
Roadways are designed to serve several functions. While some roadways are made to move a large amount of vehicles over a long distance, other roadways are designed to provide vehicles with access to developments.



- **Freeway** Provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.
- Arterial (Major and Minor) Provides the next highest level of service at moderate to high speeds, with some degree of access control. Arterials are typically classified as major arterial and minor arterial.
- Collector (Major and Minor) Provides a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials. Collectors are typically classified as major collector and minor collector.
- Local Road Consists of all roads not defined as arterials or collectors; primarily provides access to land with little or no through movement.

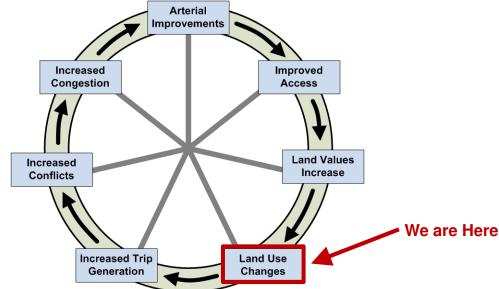
# **Functional Design (Hierarchy of Roadways)**

Strategy to appropriately connect roadways based on their functional classification with regard to mobility and access. Establishing the hierarchy of roadways increases traffic safety and preserves the public investment in roadways and the private investment in abutting property.



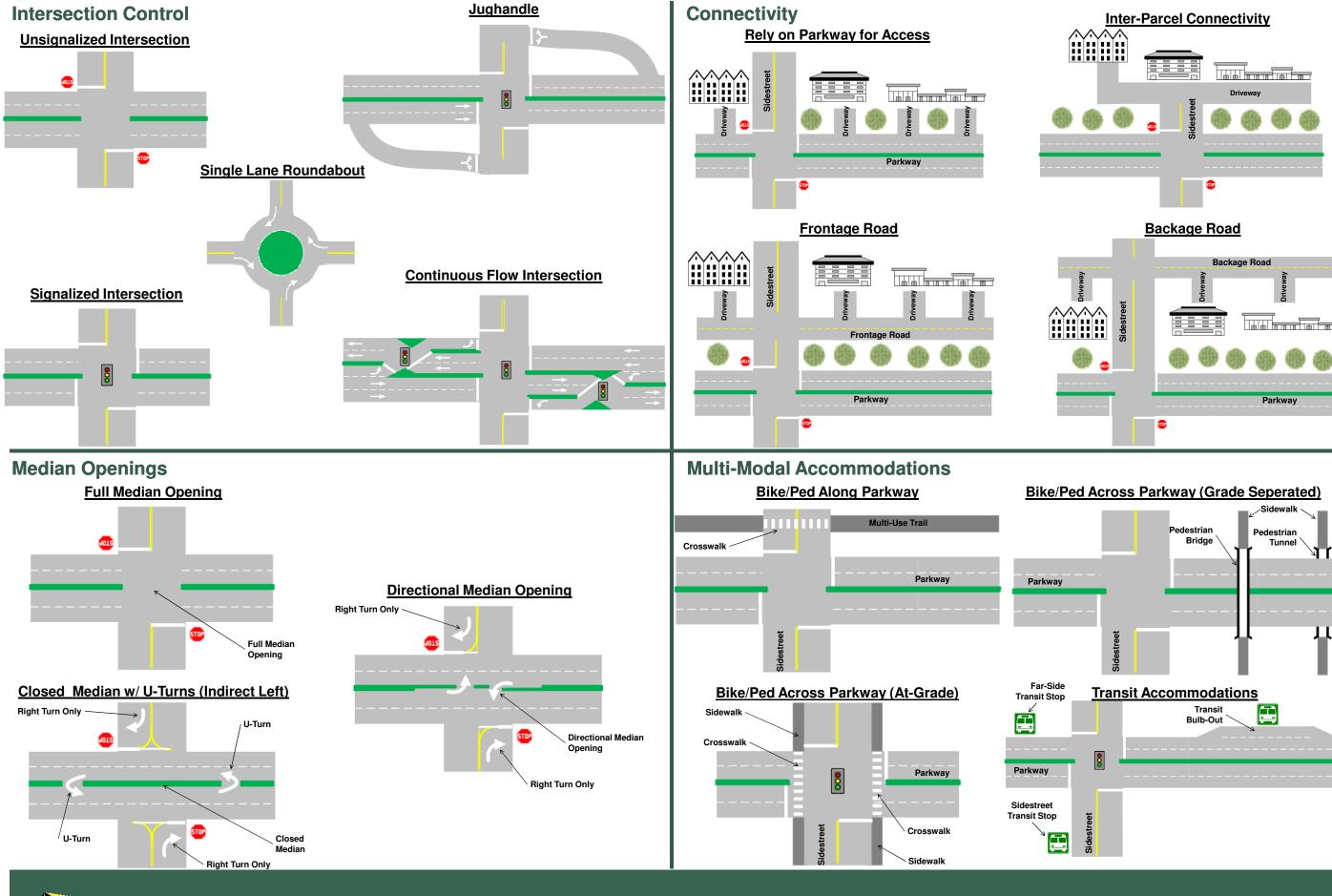
# **Corridor Life-Cycle**

Suburbanizing corridors evolve over time - residential uses decline while commercial uses increase; commercial uses dependent on automobile pass-through traffic also decline over time but other commercial, not dependent on auto pass through, increase. The management of this corridor's life cycle is the key to sustainable growth and development and management of travel conditions.











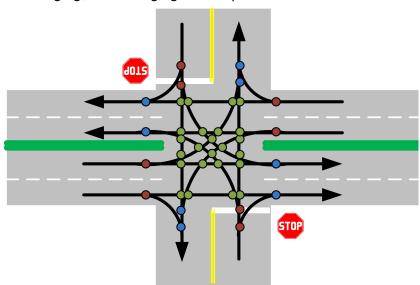
What is Access Management?
South Fulton Parkway Access Management Study



## **Conflict Points are:**

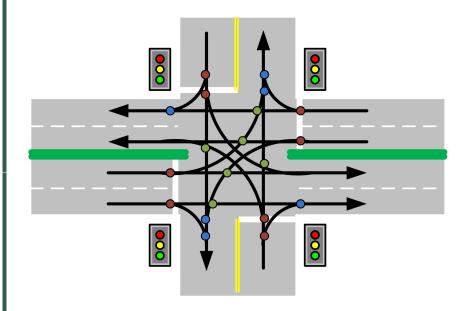
The intersection of two different vehicle paths. This can be an intersection of a crossing,

diverging, or converging vehicle paths.



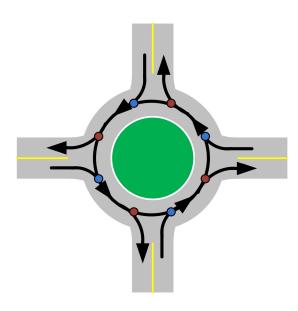
Unsignalized - 40 Conflicts

- Crossing (24)
- Diverging (8)
- Converging (8)



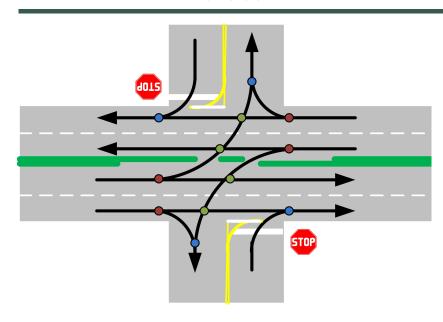
Signalized - 20 Conflicts

- Crossing (6)
- Diverging (8)
- Converging (6)



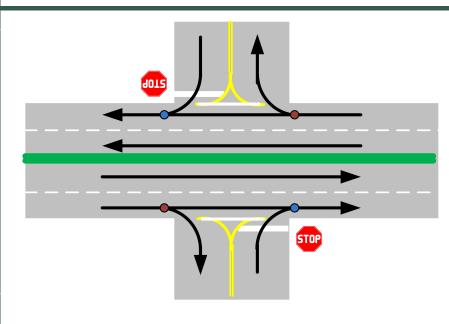
Single Lane Roundabout - 8 Conflicts

- Crossing (0)
- Diverging (4)
- Converging (4)



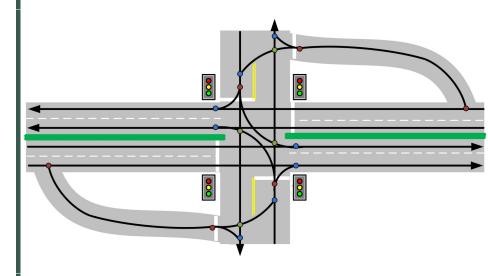
Directional Median Openings - 12 Conflic

- Crossing (4)
- Diverging (4)
- Converging (4)



Closed Median - 4 Conflicts

- Crossing (0)
- Diverging (2)
- Converging (2)



Jughandle - 18 Conflicts

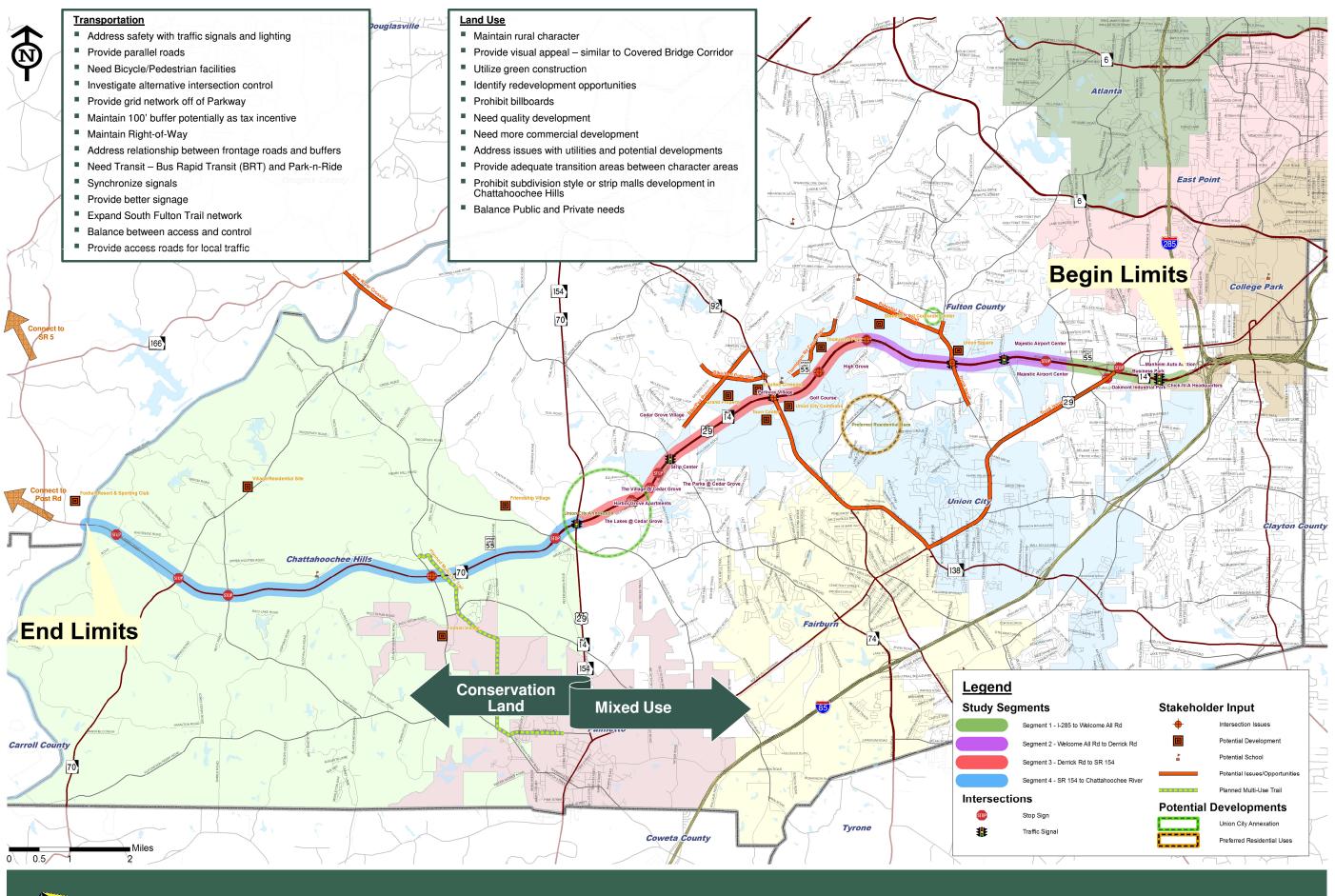
- Crossing (4)
- Diverging (6)
- Converging (8)



What is Access Management?

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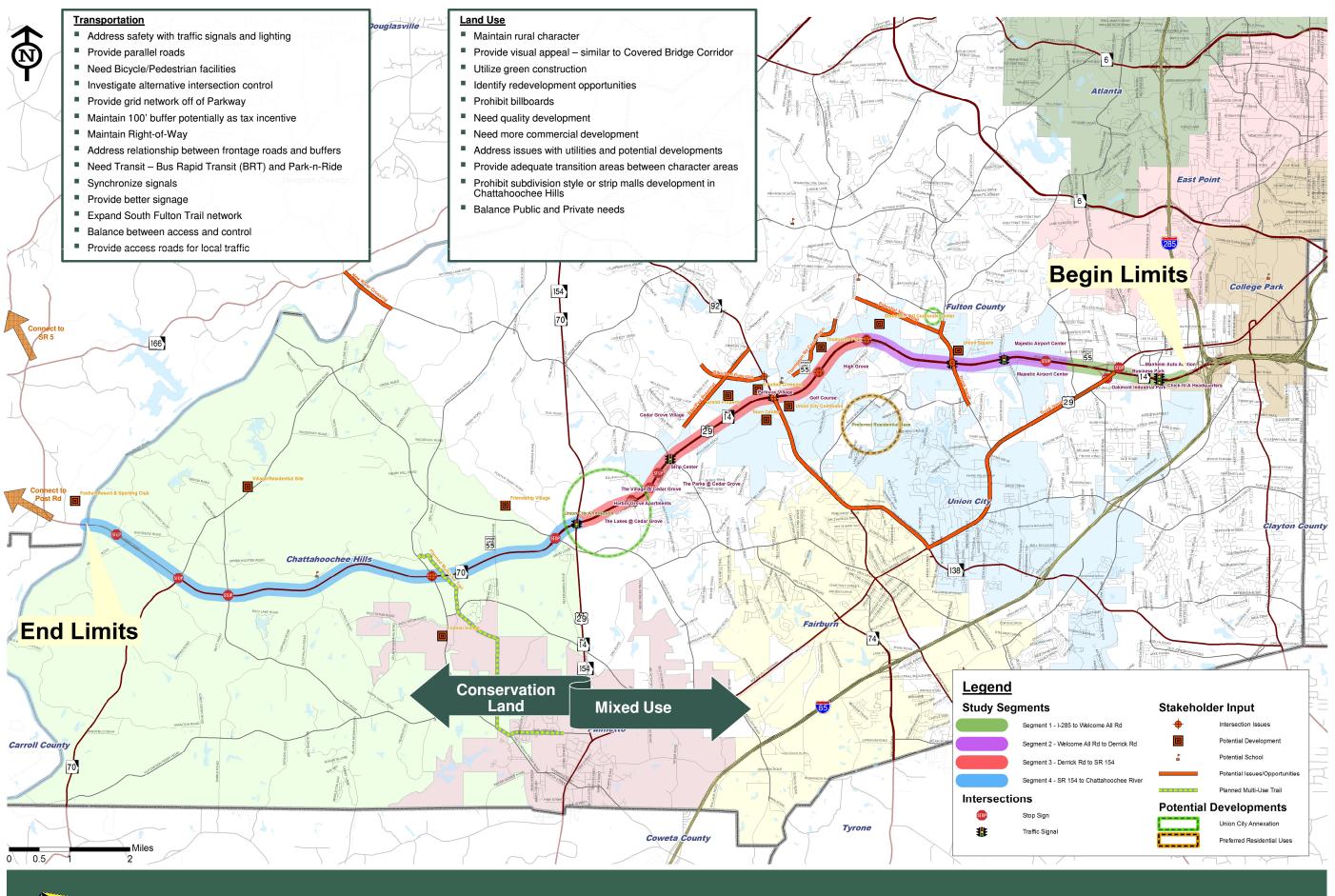






Stakeholder Input
South Fulton Parkway Access Management Study

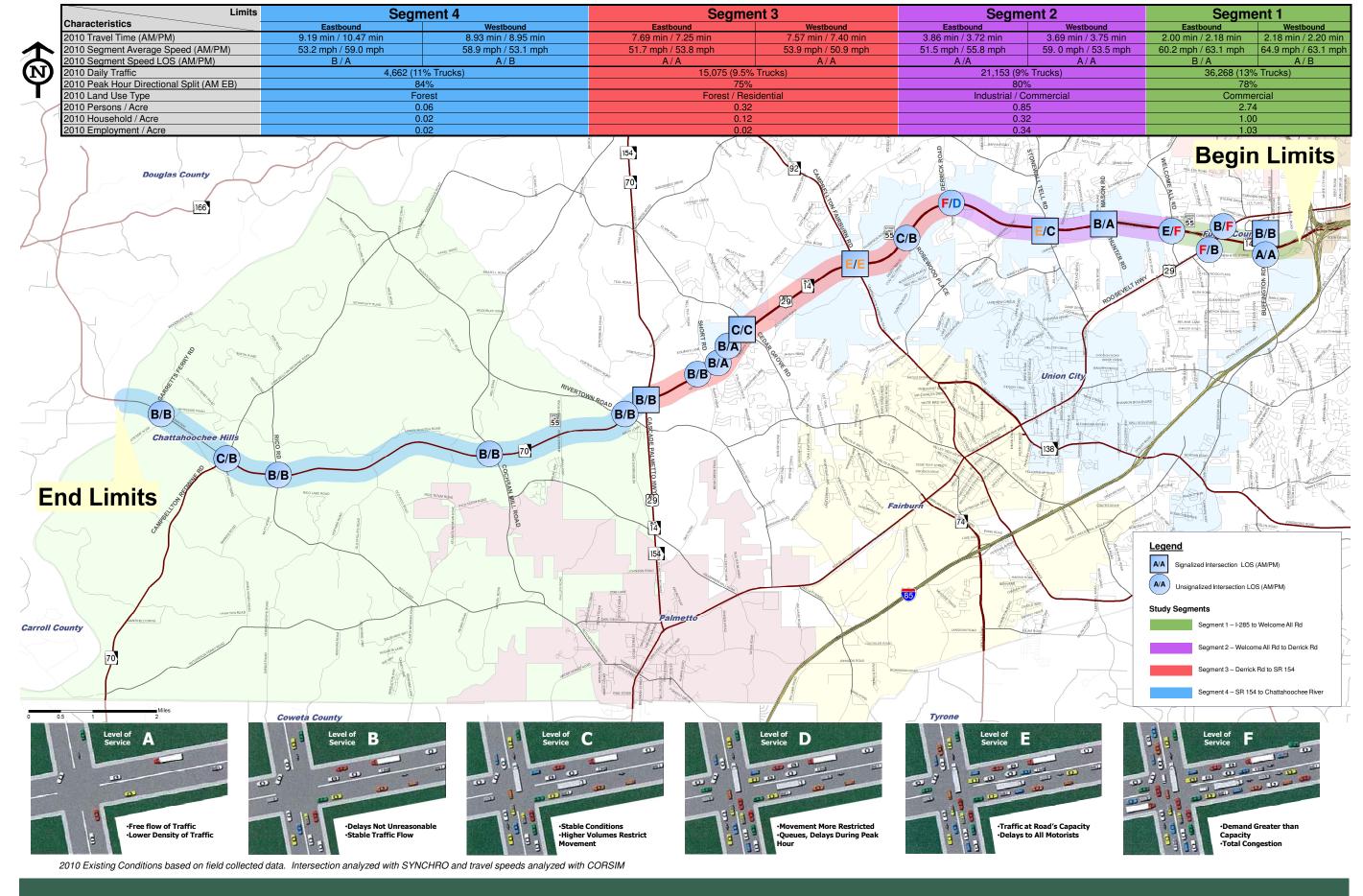






Stakeholder Input
South Fulton Parkway Access Management Study





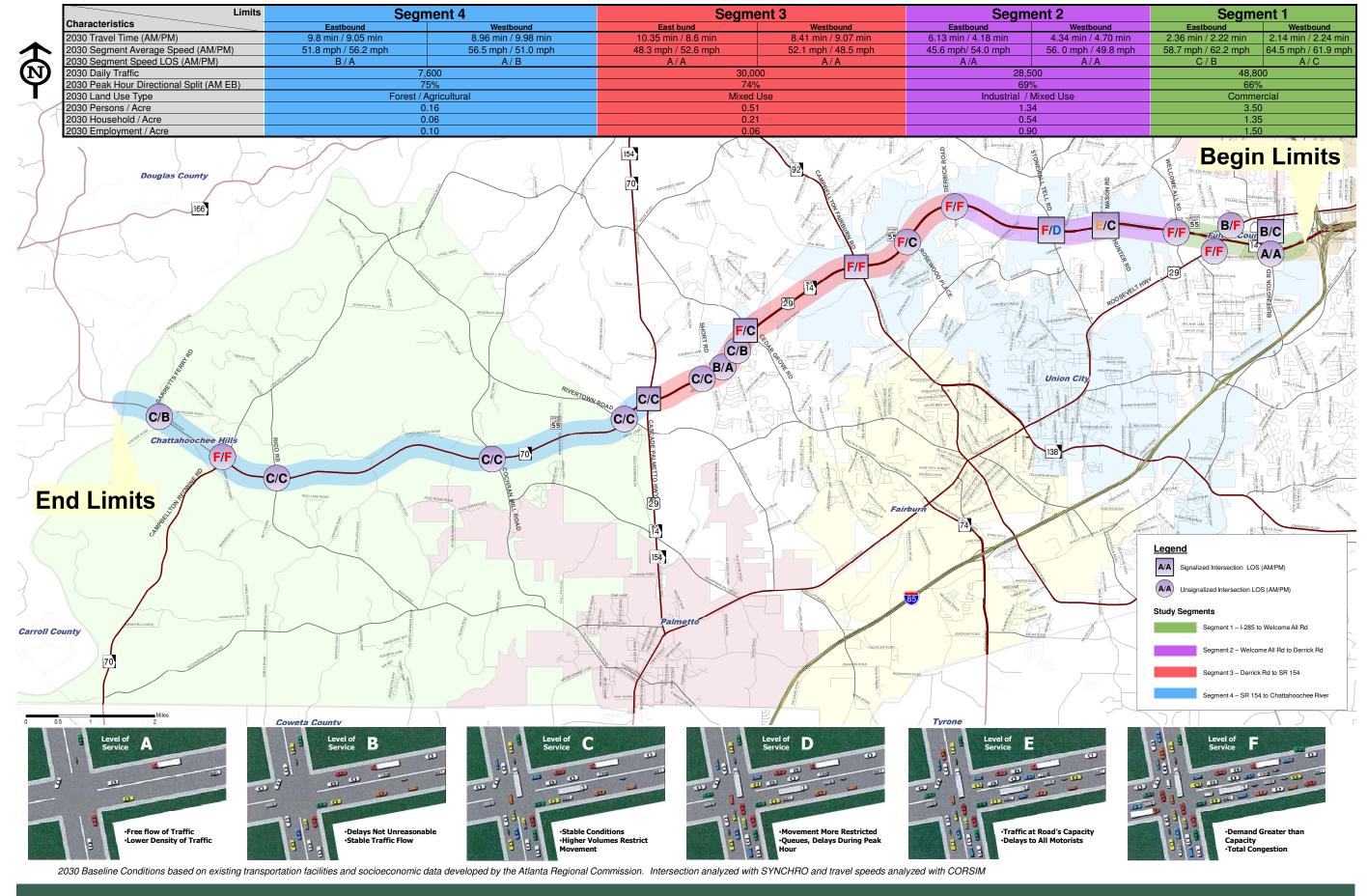


2010 Existing Level of Service (LOS)





HNTB







## **Corridor Vision:**

South Fulton Parkway will be a vibrant corridor in the Atlanta region over the next 20 years. The corridor will support local and regional economic vitality through future development, viable transportation connections, improvements to the safety and operations of transportation facilities, and preservation of the natural environment through integrated planning efforts and implementation of sustainable solutions.

## **Corridor Goals:**

- Goal 1.0 Maintain Mobility While Enhancing Access
- Goal 2.0 Contribute to the Economic Vitality of the Region
- Goal 3.0 Unify, Connect, and Integrate Uses Along the Corridor
- Enhance Safety for All Modes of Transportation
- Goal 5.0 Promote Partnerships between Agencies, Municipalities, Businesses, and Residential Communities
- Goal 6.0 Enhance Livability for All Users
- Protect Existing Resources and Communities
- Goal 8.0 Maintain the Visual Character and Identity of the Corridor

## **Corridor Performance Measures:**

- Travel Time or Vehicle Hours of Travel (VHT)
- Level of Service
- Intersection Spacing
- Conflict Points
- Environmental Impacts
- Parcel Access

## **Corridor Analysis Process**



### **Transportation**

- Traffic Volumes
- Turning Movements & Conditions
- Travel Times & Traffic Patterns
- Freight Movement
- Transit Operations
- Bicycle & Pedestrian Facilities
- Access Locations
- Crash Analysis

#### **Land Use**

- Existing & Future Land Use
- Zoning Ordinances
- Parcel Data
- Development Regulations
- Development Plans / DRIs
- Environmental Constraints
- Community Facilities Utilities

## **Fundamentals**

- Preserve Mobility
- Improve Safety
- Reduce Land Use Conflicts
- Protect Environment
- Promote Economic Development

### **Action Items**

- Apply Access Management Principles
- Minimize Turn Movements / Conflicts
- Enhance Connectivity
- Provide Adequate Access / Signals
- Enforce Land Use / Zoning Regulations

## **Roadway Spacing**

- Signalized Intersections

- Unsignalized Intersections
- Cross Streets
- Driveways

## Land Use

- Zoning
- ROW Dedication

## Overlay Districts

### **Alternative Access**

Turn Lanes

Acceleration Lanes

Deceleration Lanes

Transit Accomodations

- Inter-Parcel Connectivity

- Driveway Widths Curve Clearance / Radius
- Intersection Functional Area
- Sight Distance

- Frontage Roads
- Backage Roads
- Bicycle/Pedestrian Facilities

**Travel Lanes** 

## **Median Openings**

- Spacing
- Full Openings
- Directional Openings

# **Access Management Policies Prioritized Multi-Modal Improvements** Land Use & Regulatory Controls Alternative Funding Sources

Note: Vision and Goals developed based on Stakeholder Input



**Corridor Vision, Goals, and Performance Measures** South Fulton Parkway Access Management Study



